

STANFORD UNIVERSITY  
STANFORD, CALIFORNIA

DEPARTMENT OF GENETICS  
*School of Medicine*

June 26, 1959

Dear Mr. Garfield:

Thank you for your letter of the 23d, and the enclosed material which I have read with great interest.

Let me say again, to start with, that I have no reservations at all about the utility and importance of citation-indexing in science. I will happily lend whatever assistance I can to help its realization.

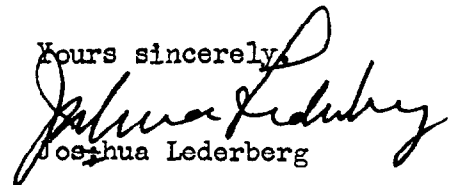
Reading your proposal to NSF, and the correspondence related to it, I began to have some serious questions about the necessity of more research, and to wonder if in fact the concept hadn't already been well enough sold to the NSF reviewers. I had to concur with their expressed doubts about "exactly what you proposed to do" in the actual project, as it was written. My own feeling at the present time is that the utility and feasibility of citation-indexing are, in fact, self-evident; it is rather doubtful that any limited sample would serve to convince anyone else who did not already see the point. If you could visualize exactly what questions you might hope to answer by the project, I am sure you would find it much easier to enlist support for a pilot study.

I don't doubt that 'systems design' decisions will have to be made, but shouldn't this be done as an aspect of full-scale development of a realized project: how would ~~it~~ it be a subject of investigation in a pilot study? If these questions are materially answered now, you should press for an operational test.

But on the whole, I find myself rather more sympathetic with the viewpoint summarized in Dwight Gray's letter of 23 Oct 58, and which I would interpret as a constructive basis for further dealings on your part. What is your reaction to his proposal for recruiting a consumers' group for scientific orientation on the first stages of an actual index. I can easily see that \$59,000 might be thought a wasteful expenditure if its main effect were to reprove the obvious, and especially if not very much more than this would be needed to get a useful product.

What NSF has in mind, and I can partly agree with, is to try to anticipate and solve some of the problems that might come up by the collective insight of an advisory committee, rather than through operational testing of samples. I am not certain which would be more mostly in the long run; an advisory committee would at least help broaden the base of explicit backing for CI. My tactical suggestion to you would then be to take up Gray's proposal, and to ask NSF's assistance in organizing a group for 'scientific direction' and see what happens. (Meanwhile, you should make a multiple resubmission of your research proposal with a more explicit statement of investigative aims. But I think you've already remarked that you could more easily get more comprehensive help to do the project: perhaps it is time to jump in! ) If there are still many uncertainties, this adv. comm. is more likely to insist than acquiesce on preliminary research.

Yours sincerely,

  
Joshua Lederberg

P.S.

I would make a distinction between the "dolts" you deal with in the Patent Office and in NSF, AEC etc. I don't know the Information specialists, but have the highest regard for the research-grant people in all these agencies. The most important point is they do not rely on what you would consider their own meager judgment, but must send out the proposals for review by our colleagues, and their judgment is what counts. You have every right, and should be encouraged in this, to insist on resubmitting your proposals for further review if you feel there has been any misunderstanding. In this case, unlike most research proposals, I think there is good reason for face-to-face ~~XXXX~~ negotiation of the details, and I hope that NSF will give you the facility to do this, e.g., by the advisory committee mechanism already suggested.

I am <sup>sending</sup> ~~enclosing~~ a reprint of the review article I mentioned, and also of some of my other papers in which I mark citations to other review articles. This use of a review to blanket ~~XXXX~~ earlier literature is probably more prevalent in biology than chemistry, and for reasons that may be too obvious (the looser connectedness of work in biology than in chemistry where the typical citation ~~is~~ is to a factual observation rather than a concept). In biology, it is quite likely that review articles ~~it~~ would be conventionally used (in a CI penetrated domain) as a mechanical substitute for topical definition of content of a paper.

PRS;

A propos Current Contents, wouldn't it pay you to offer a trial subscription for say about 6 weeks for a nominal price, even free, to induce a state of addiction to it? This enticement would be particularly effective with your academic clientele (and I would even ask for the same myself, to decide whether to get another ~~trial~~ individual subscription (that I can mark up) or continue to BB&S others'. If you want to be cagey (which I shouldn't) you might limit this offer to department heads.